



## Granite City, Illinois, Site

### FACT SHEET

*This fact sheet provides information about the Granite City, Illinois, Site.  
This site is managed by the U.S. Department of Energy Office of Legacy Management.*

### Site Description and History

The Granite City, Illinois, Site is located at 1417 State Street, approximately 10 miles northeast of St. Louis, Missouri. The site consists of the Betatron Building, a two-story concrete and metal building.

From 1958 to 1966, General Steel Castings Corporation, under purchase orders from Mallinckrodt Chemical Works, x-rayed uranium ingots in the Betatron Building to detect metallurgical flaws in the uranium metal. This work was performed for the U.S. Atomic Energy Commission (AEC), a predecessor agency of the U.S. Department of Energy (DOE). At completion of the AEC activities, the site was remediated to comply with radiological protection standards in effect at the time.

In 1989, Oak Ridge National Laboratory (ORNL) conducted radiological surveys at the Granite City Site to determine current radiological conditions in and around the Betatron Building. Survey results indicated that only a limited area of this storage building was contaminated above current guidelines. However, AEC-related activities had resulted in uranium concentrations that exceeded DOE guidelines on and near an industrial vacuum cleaner and on a few localized spots on the ground-level floor.

In 1991, ORNL surveyed a second betatron building (referred to as the New Betatron Building) because information indicated that it too may have been used to examine uranium ingots. However, survey results showed no contamination.

On the basis of contamination identified in the 1989 surveys, DOE designated the Granite City Site for remedial action under the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1992 and recommended an expedited remediation because the radioactive contamination was limited to small amounts in the interior of the Betatron Building.

Decontamination included packaging the industrial vacuum cleaner and its contents in a 55-gallon galvanized steel drum. The 107-square-foot contaminated area of the floor was decontaminated by vacuuming, washing with a light abrasive mixture, and, where necessary, scabbling, which is a more aggressive



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*Location of the Granite City, Illinois, Site*

technique that involves removing the top surface of the concrete. In addition, the ventilation duct was removed and compacted for waste disposal. Asphalt and soil were also removed for disposal at two floor locations along the railroad track. Cleanup was completed in June 1993.

After post-remedial action surveys verified that the site was remediated to levels below DOE guidelines, the waste was shipped to Clive, Utah, for permanent disposal.

### Regulatory Setting

The AEC established FUSRAP in March 1974 to evaluate radioactive contamination at sites where work was performed to develop the nation's nuclear weapons and early atomic energy program. After reviewing records and radiometric surveys for more than 600 sites connected with the nuclear weapons program, DOE identified 46 sites that required cleanup, including the Granite City Site. Congress transferred

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responsibility for FUSRAP site characterization and remediation to the U.S. Army Corps of Engineers in 1997. DOE retains responsibility for long-term surveillance and maintenance of remediated FUSRAP sites.

The Granite City Site was remediated to criteria in *Guidelines for Residual Radioactive Material at Formerly Utilized Sites Remedial Action Program and Remote Surplus Facilities Management Program Sites*. On June 7, 1994, DOE certified that the property was in compliance with applicable DOE standards and criteria developed to protect health, safety, and the environment. A notice of cleanup certification for the site was published in the *Federal Register* on June 13, 1994.

In fiscal year 2004, DOE transferred responsibility for the Granite City Site from the DOE Office of Environmental Management to the DOE Office of Legacy Management.

## Current Site Conditions

Post-remedial action survey results indicate that the radiological condition of the Granite City Site is in compliance with applicable DOE standards and guidelines for cleanup of residual radioactive contamination. DOE has subsequently certified that the building may now be used without concern and has released the site for unrestricted use. The site has been restored to a condition acceptable to the owner.

## Legacy Management Activities

No monitoring, maintenance, or site inspections are required for the Granite City Site. Legacy Management responsibilities consist of managing site records and responding to stakeholder inquiries.

## Contacts

Documents related to the former Granite City Site are available on the DOE Legacy Management website at <http://www.LM.doe.gov/land/sites/il/granite/granite2.htm>. For more information about DOE Legacy Management activities at the Granite City Site, contact:

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